

Remarks:

Claims 35-40 and 43-46 are pending. Applicant has amended the claims to distinctively claim the subject matter of the invention. By virtue of this amendment, claims 35 and 40 are amended. Claims 41 and 42 were previously canceled without prejudice. No new matter is added as support for the amendments is found within the Specification and the drawings. It is submitted that the application, as amended, is in condition for allowance.

The Applicant is not conceding that the subject matter recited in the amended or canceled claims is not patentable over the art cited by the Examiner. The amended, withdrawn or cancelled claims are provided solely to facilitate expeditious prosecution of the allowable subject matter. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by the amended or cancelled claims in one or more continuing applications.

Claim of Priority:

Applicant thanks the Examiner for acknowledgement of the Applicant's claim of foreign priority under 35 U.S.C. § 119(a). However, we note that on the Office Summary page box "b" was checked indicating that only some of the priority documents are received. There is only one foreign priority application in this matter and it was submitted with the USPTO at the time of filing of the present application. Please make the proper corrections. Thank you.

Figures:

The Applicant thanks the Examiner for finding the drawings acceptable.

§103 Rejection(s):

Claims 35-40 and 43-46 are rejected under 35 U.S.C. §103(a) as being unpatentable over what the Examiner contends is applicant admitted prior art (hereafter "AAPA") in view of U.S. Patent No. 4,604,741 to Barsellotti (hereafter "Barsellotti") and U.S. Patent No. 5,181,246 to Mikki (hereinafter "Mikki"). This rejection is respectfully traversed.

It has been long held that to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

In other words, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Further, according to MPEP §2143,¹ to establish a prima facie case of obviousness, the Examiner must clearly articulate the reason(s) why the claimed subject matter would have been obvious at the time of invention. Exemplary rationales that may support a conclusion of obviousness include:

- (a) Combining prior art elements according to known methods to yield predictable results;
- (b) Simple substitution of one known element for another to obtain predictable results;
- (c) Use of known technique to improve similar devices (methods, or products) in the same way;
- (d) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; etc.

The claimed subject matter is directed to a method of controlling quality of output produced by a multifunction device (MFD) capable of producing both sound and vibration in response to receiving electronic signals, wherein the MFD is embedded in a mobile communication system. It is determined whether the mobile communication system is in a first, second, or third state. The first state corresponds to a state in which a caller's voice signal is being processed by the mobile communication system. In the second state a ring signal is being

¹ *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739-1741, 82 USPQ2d 1385, 1395-97 (2007).

processed. And, in the third state a vibration signal is processed. See Figures 3 and 4, paragraphs 41-63 of the application as filed.

In the first state, a first electronic path is used for processing the voice signals by (1) amplifying voice signals, (2) without modulating the amplified voice signals, filtering the amplified voice signals to remove low frequency resonance components in the amplified voice signals that fall below a first threshold, and (3) providing the amplified, filtered voice signals to the MFD.

In the second state, the first path is used for (1) amplifying ring tone signals in an amplifier external to the audio processor, (2) filtering the amplified ring tone signals to remove low frequency resonance components in the amplified ring tone signals that fall below a first threshold, and (3) providing the amplified, filtered ring tone signals to the MFD.

In the third state, a second path is used for (1) amplifying a vibration signal in the amplifier external to the audio processor and (2) providing the amplified, non-filtered vibration signal to the MFD by way of bypassing the filtering. The second path is different from the first path as shown in Figures 3 and 4 as filed, in that the second path does not allow for the vibration signal generated by the audio processor to be routed through the filter after the vibration signal has been amplified by the amplifier. In contrast, the first path, allows for the voice and ring signals to be selectively routed through the filter after amplification.

None of the cited references teach or disclose the above-noted features and functional elements. The Examiner is reminded that in the claims “[a] functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step.” MPEP §2173.05. As provided in further detail below, the cited references fail to teach and suggest all the above-noted elements and functional relationship recited in the pending claims.

The Examiner continues to reject the pending claims primarily based on AAPA in combination with newly cited references Barsellotti and Mikki. The Examiner, however, fails to appreciate that neither of the above references as used teach or suggest all the recited elements. Particularly, the Examiner fails to acknowledge that AAPA is an improper 103 reference because one of ordinary skill reading the AAPA would not be motivated to modify the AAPA in the direction of the claimed subject matter in view of Barsellotti and Mikki.

That is, AAPA teaches a system and method of amplification that goes against the principals recited in the pending claims. For example, AAPA discloses an audio amplifier 12 that is external to the audio processor. The external amplifier amplifies voice (i.e., analog) signals only without regard to any signaling modes or making any distinction between whether the signal is a voice signal, ring signal or vibration signal. See figure 2, paragraphs [0010] and [0012].

In contrast, the claimed subject matter recites distinguishing between three different states and taking a different course of action (i.e., processing the signals via different electronic signal processing paths) depending on the state that is detected. Particularly, in the first and second states, the audio and ring signals are amplified and filtered by way of a first path, while in the third state, vibration signals are amplified, without being filtered, and are then provided to the MFD. Accordingly, it is respectfully submitted that AAPA directly teaches away from the claimed subject matter. Since the AAPA is patentably distinguishable from the claimed subject matter, the AAPA even if relevant cannot be used as a primary reference.

With respect to the newly cited references, Barsellotti discloses a circuit for receiving voice and data signals on a balanced line, the data signal being an amplitude modulated form of a carrier signal having a frequency at least twice as high as the highest frequency in the voice band. The circuit matches the input impedance thereof to a first nominal balanced line impedance with respect to voice signals and a second nominal balanced line impedance with respect to data signals, applies the data signals to an unbalanced data output terminal, and applies the voice signals to a terminal connected to a bidirectional unbalanced input/output lead of a PABX. The circuit also receives data signals from a terminal connected to an unbalanced data

input lead from the PABX and voice signals from the terminal connected to the unbalanced bidirectional input/output lead.

According to Barsellotti the incoming data and voice signals are mixed and applied to the balanced line while preventing the mixed signals from being fed back to the unbalanced data output lead and the unbalanced bidirectional input/output lead. The circuit further provides a low resistance DC current path for applying sufficient operating battery to the balanced line for long subscriber loops. The carrier signal is substantially removed in frequency from the upper limit of the voice band, thus alleviating the requirement of multistage, sharp cut-off and critically adjusted filters. However, the carrier frequency is low enough so as not to be substantially radiated from the subscriber's line or be seriously deteriorated during transmission.

Mikki discloses privacy communication device uses a control channel (5) in addition to a voice channel (4) in communicating with other privacy communication device. Each privacy communication device employs a ring modulator (8) and a ring demodulator (14). A specific modulator carrier frequency to be given to the ring modulator (8) is selected by function of a control signal transmitted on the control channel (5) out of a plurality of modulator carrier frequencies prepared in advance. Likewise, a specific demodulator carrier frequency to be given to the ring demodulator (14) is selected by function of a control signal transmitted on the control channel (5) out of a plurality of demodulator carrier frequencies prepared in advance. Hence, when the specific modulator carrier frequency and the specific demodulator carrier frequency are updated at arbitrary intervals, a third person cannot easily identify the varied modulator carrier frequency and demodulator carrier frequency. Thus, secrecy of a voice signal transmitted through the voice channel (4) between the two privacy communication devices is enhanced.

Barsellotti is cited by the Examiner apparently for the proposition that voice signals can be amplified. And, Mikki is cited for the proposition that signals can be filtered. Respectfully, the notion that voice signals can be amplified or filtered by itself is nothing new. Therefore, citing to Barsellotti or Mikki without specifically showing how Barsellotti and Mikki in combination with the AAPA teach and suggest all the recited functional features and the signal processing conditions based on 3 separately recognized states is merely a rejection based on hindsight. In other words, the Examiner has managed to find couple of references where each

reference among other things teaches a particular element of the claimed subject matter. The Examiner now insists that he can ignore all the other specific components of the claims and the references because according to the Examiner it would be obvious to take each element out of one particular context and apply it in a completely different context.

For example, within the context of Barsellotti, there seems to be no need for filtering the signals after the amplification process. Therefore, one of ordinary skill would not be motivated to apply the filtering process suggested in Mikki to Barsellotti in the direction of the current invention. That is, applying the filtering process suggested in Mikki to Barsellotti will likely render the suggested system inoperable. Further, the claims as amended recite that no modulation is applied to the amplified signal before it is filtered. In contrast, Mikki directly teaches away from said recited feature by requiring for the signal to be modulated after amplification and prior to filtering to maintain the privacy feature which is at the core of Mikki's disclosure.

It is respectfully noted that §103 does not allow the Examiner to engage in a picking and choosing from the prior art only to the extent that it will support a holding of obviousness, while excluding parts of the prior art essential to the full appreciation of what the prior art suggests to one of ordinary skill in the art. *In re Wesslau*, 147 USPQ 391 (CCPA 1975). That is, the Examiner is not permitted to use the Applicant's disclosure as a roadmap to combine the two cited references with the AAPA, while nothing in either of the references teaches that the AAPA can be modified in the manner the Examiner has suggested. See *Grain Processing Corp. v. American Maize-Products Corp.*, 840 F.2d 902, 907 (Fed. Cir. 1988). Accordingly, the 103 grounds of rejection should be withdrawn.

The question of whether a cited reference can properly be modified in a §103 rejection is not whether a particular limitation was known at time of invention, but rather whether there is a reason that would make it obvious for one of ordinary skill in the art at the time of the invention to modify the cited reference to include that particular limitation. As the U.S. Supreme Court has affirmed, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art... it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant

field to combine the elements in the way the claimed new invention does." See *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ 2d 1385, 1397 (2007).

While the suggestion to modify or combine references may come from the knowledge and common sense of a person of ordinary skill in the art, the fact that such knowledge may have been within the province of the ordinary artisan does not in and of itself make it so, absent clear and convincing evidence of such knowledge. *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 USPQ 2d 1225, 1232 (Fed. Cir. 1998).

Here, the modification or combination proposed by the Examiner is not based on any clear and convincing evidence of a reason, suggestion, or motivation in the prior art that would have led one of ordinary skill in the art to combine the references. Rather, the reason, suggestion and motivation for the combination of references proposed by the Examiner simply is impermissible hindsight reconstruction given the benefit of Applicant's disclosure.

The Federal Circuit has consistently held that hindsight reconstruction does not constitute a prima facie case of obviousness under 35 U.S.C. §103. *In re Geiger*, 2 USPQ 2d 1276 (Fed Cir. 1987). Unfortunately, the Examiner rather than pointing to what the prior art discloses and teaches as to making the suggested modification relies on assumptions and statements without any support in the record. As such, the Examiner's statements regarding obviousness and motivation to modify are but shortcuts to a conclusion of obviousness devoid of the required analytical approach based on what is actually disclosed in the prior art.

Reliance on impermissible hindsight to avoid express limitations in the claims and setting forth unsupported hypothetical teachings to recreate the Applicant's claimed invention cannot establish a prima facie case of obviousness. Since obviousness may not be established by hindsight reconstruction, Applicant invites the Examiner to point out the alleged motivation to combine with specificity,² or alternatively provide a reference or affidavit in support thereof, pursuant to MPEP §2144.03.³

² *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

³ "The rationale supporting an obviousness rejection may be based on common knowledge in the art or "well-known" prior art . . . If the applicant traverses such an assertion the examiner should cite a reference in support of his or her position. When a rejection is based on facts within the personal knowledge of the examiner . . . the facts must be supported, when called for by the applicant, by an affidavit from the examiner."

Since no reasonable justification is provided in the Office Action as to how such modification or combination is possible and obviousness may not be established based on hindsight and conjecture, it is respectfully requested that the §103 rejection be withdrawn. For the above reasons, none of the cited references, either alone or in combination, teach or suggest all the elements recited in the claims. Therefore, it is respectfully submitted that the claims are in condition for allowance.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has expressly argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to contact the undersigned attorney at the Los Angeles, California, telephone number (213) 623-2221 or jfar-hadian@lhlaw.com to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

Date: September 2, 2009
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